

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		<i>Complete if Known</i> <b>Application Number</b> 09/933,972		
		<b>Filing Date</b> 2001-08-20		
		<b>First Named Inventor</b> PHILIP HAWKES		
		<b>Art Unit</b> 2439		
		<b>Examiner Name</b> SIMITOSKI, MICHAEL J		
<b>Sheet</b>	<b>1</b>	<b>of</b>	<b>11</b>	<b>Attorney Docket No:</b> 010497

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	001	US5164988	11-17-1992	MATYAS; Stephen M. et al.	
	002	US5237612	08-17-1993	RAITH; Alex K.	
	003	US5241598	08-31-1993	RAITH; Krister A.	
	004	US5748736	05-05-1998	MITTRA; Suvo.	
	005	US5778059	07-07-1998	LOGHMANI; Masoud. et al.	
	006	US6295361	09-25-2001	KADANSKY; Miriam C. et al.	
	007	US6473858	10-29-2002	SHIMOMURA; Tsutomu. et al.	
	008	US6658463	12-02-2003	DILLON; Douglas M. et al.	
	009	US6862684	03-01-2005	DIGIORGIO; Rinaldo.	
	010	US6959384	10-25-2005	SERRET-AVILA; Xavier.	
	011	US7069436	06-27-2006	AKACHI; Masateru.	
	012	US7181620	02-20-2007	HUR; Matthew.	
	013	US20020014159	02-07-2002	TATSUMI; Yasuo. et al.	
	014	US20020071558	06-13-2002	PATEL; Sarvar.	
	015	US20020076195	06-20-2002	NAKAJIMA; Yasuhisa. et al.	
	016	US20020102964	08-01-2002	PARK; Hyoung Sun.	
	017	US20030030581	02-13-2003	ROY; Aloke.	
	018	US20030031322	02-13-2003	BECKMANN; Mark. et al.	
	019	US20030087653	05-08-2003	LEUNG; Nikolai K.N. et al.	
	020	US20030123669	07-03-2003	KOUKOLIDIS; Vassilios. et al.	

EXAMINER SIGNATURE

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \*Applicant's unique citation designation number (optional).  
 See Kinds Codes ofUSPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. \*Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).  
 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document, kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. \*Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by theUSPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO		<i>Complete if Known</i>		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		<b>Application Number</b>	09/933.972	
		<b>Filing Date</b>	2001-08-20	
		<b>First Named Inventor</b>	PHILIP HAWKES	
		<b>Art Unit</b>	2439	
		<b>Examiner Name</b>	SIMITOSKI, MICHAEL J	
<b>Sheet</b>	<b>2</b>	<b>of</b>	<b>11</b>	<b>Attorney Docket No:</b> 010497

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	021	US20030126440	07-03-2003	GO; Naomi. et al.	
	022	US20030135748	07-17-2003	YAMADA; Kazuhiro. et al.	
	023	US20030217057	11-20-2003	KUROIWA; Minoru. et al.	
	024	US20040151317	08-05-2004	HYPPA; Timo. et al.	
	025	US20040199474	10-07-2004	RITTER; Rudolf.	
	026	US20040243808	12-02-2004	ISHIGURO; Ryuji. et al.	
	027	US20050063544	03-24-2005	UUSITALO; Ilkka. et al.	
	028	US20050165711	07-28-2005	HAMATSU; Makoto.	
	029	US20050238315	10-27-2005	KATAOKA; Mitsuteru.	
	030	US20070116282	05-24-2007	HAWKES; Philip Michael et al.	
	031	US20070280169	12-06-2007	CAM WINGET; Nancy	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T 6
		Country Code <sup>3</sup> - Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
	032	JP2003124927	04-25-2003	SONY CORP		<input checked="" type="checkbox"/>
	033	JP2001136507A	05-18-2001	SONY CORP.		<input checked="" type="checkbox"/>
	034	JP2001177564A	06-29-2001	HITACHI LTD.		<input checked="" type="checkbox"/>

EXAMINER SIGNATURE

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \*Applicant's unique citation designation number (optional). 2. See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. 3. Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). 4. For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. \*Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. \*Applicant is to place a check mark here if English language translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for Form 1449/PTO		Complete if Known		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		Application Number	09/933,972	
		Filing Date	2001-08-20	
		First Named Inventor	PHILIP HAWKES	
		Art Unit	2439	
		Examiner Name	SIMITOSKI, MICHAEL J	
Sheet	3	of	11	Attorney Docket No.: 010497

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.†	Foreign Patent Document Country Code <sup>3</sup> - Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T 6
	035	JP2002064785A	02-28-2002	SONY CORP.		<input checked="" type="checkbox"/>
	036	JP2002232418A	08-16-2002	LUCENT TECHNOLOGIES INC.		<input checked="" type="checkbox"/>
	037	JP2003099327A	04-04-2003	AKASE YOICHI.		<input checked="" type="checkbox"/>
	038	JP2003259284A	09-12-2003	TOSHIBA CORP.		<input checked="" type="checkbox"/>
	039	JP2003297015A	10-17-2003	TOSHIBA CORP.		<input checked="" type="checkbox"/>
	040	JP2004048718A	02-12-2004	MATSUSHITA ELECTRIC IND CO LTD.		<input checked="" type="checkbox"/>
	041	JP5216411A	08-27-1993	IBM.		<input checked="" type="checkbox"/>
	042	JP000513519	10-10-2000	NOKIA TELECOMMUNICATIONS OY.		<input checked="" type="checkbox"/>
	043	JP11510668T	09-14-1999	ICO SERVICES LTD.		<input checked="" type="checkbox"/>
	044	JP2002505458T	02-19-2002	TELEFONAKTIEBOLAGET ERICSSON LM.		<input checked="" type="checkbox"/>
	045	JP2002521879T	07-16-2002	CANAL SOCIETE ANONYME.		<input checked="" type="checkbox"/>
	046	JP2003339000A	11-28-2003	NEC CORP.		<input checked="" type="checkbox"/>
	047	KR200130725	04-16-2001	TELEFONAKTIEBOLAGET LM.		<input checked="" type="checkbox"/>
	048	WO0004718A1	01-27-2000	CANAL PLUS SA [FR]. ET AL.		<input type="checkbox"/>
	049	WO02080454A2	10-10-2002	QUALCOMM INC [US].		<input type="checkbox"/>
	050	WO2004025895A1	03-25-2004	ERICSSON TELEFON AB L M [SE]. ET AL.		<input type="checkbox"/>
	051	WO9716890A2	05-09-1997	ERICSSON GE MOBILE INC [US].		<input type="checkbox"/>
	052	WO9944114A1	09-02-1999	ERICSSON TELEFON AB L M [SE].		<input type="checkbox"/>

EXAMINER SIGNATURE

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. † Applicant's unique citation designation number (optional). ‡ See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. § Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ¶ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. § Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. \* Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO		Complete if Known			
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		Application Number	09/933,972		
		Filing Date	2001-08-20		
		First Named Inventor	PHILIP HAWKES		
		Art Unit	2439		
		Examiner Name	SIMITOSKI, MICHAEL J		
Sheet	4	of	11	Attorney Docket No:	010497

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T 6
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
	053	WO00072609A1	11-30-2000	ERICSSON TELEFON AB L M [SE]		<input type="checkbox"/>
	054	EP0636963A2	02-01-1995	IBM [US] et al.		
	055	EP0702477A2	03-20-1996	SUN MICROSYSTEMS INC [US] et al.		<input type="checkbox"/>
	056	EP0748058A2	12-11-1996	AT & T CORP [US] et al.		
	057	EP0813309A2	12-17-1997	LUCENT TECHNOLOGIES INC [US] et al.		
	058	EP0854618A2	07-22-1998	LUCENT TECHNOLOGIES INC [US] et al.		
	059	EP0924898A1	06-23-1999	INST NAT RECH INF AUTOMAT [FR] et al.		
	060	EP0928084A2	07-07-1999	MITSUBISHI ELECTRIC CORP [JP] et al.		
	061	EP0951198A2	10-20-1999	NEC CORP [JP] et al.		
	062	EP1001570A2	05-17-2000	LUCENT TECHNOLOGIES INC [US] et al.		
	063	EP1032150A2	08-30-2000	TRW INC [US] et al.		
	064	EP1075123A1	02-07-2001	LUCENT TECHNOLOGIES INC [US] et al.		
	065	EP1098446A2	05-09-2001	MITSUBISHI ELECTRIC CORP [JP] et al.		
	066	EP1117204A2	07-18-2001	HEWLETT PACKARD CO [US] et al.		
	067	EP1185125A1	03-06-2002	NTT DOCOMO INC [JP] et al.		
	068	EP1190526A1	3-27-2002	ERICSSON TELEFON AB L M [SE]		

EXAMINER SIGNATURE

DATE CONSIDERED

\*EXAMINER: Initial reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \*Applicant's unique citation designation number (optional). \* See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. \* Enter Office that issued the document, by the two-letter code (WIPO Standard ST 3). \* For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. \* Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST-18 if possible. \* Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO		Complete if Known		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		Application Number	09/933,972	
		Filing Date	2001-08-20	
		First Named Inventor	PHILIP HAWKES	
		Art Unit	2439	
		Examiner Name	SIMITOSKI, MICHAEL J	
Sheet	5	of	11	Attorney Docket No.: 010497

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
	069	GB2346512A	08-09-2000	NEC CORP [JP] et al.		
	070	JP10063598A	03-06-1998	NIPPON TELEGRAPH & TELEPHONE et al.		
	071	JP10200536A	07-31-1998	TOSHIBA CORP et al.		
	072	JP11313059A	11-09-1999	NIPPON TELEGRAPH & TELEPHONE et al.		
	073	JP11355460A	12-24-1999	MEIDENSHA ELECTRIC MFG CO LTD et al.		
	074	JP2000165258A	06-16-2000	YRP IDO TSUSHIN KIBAN GIJUTSU; TOSHIBA CORP et al.		
	075	JP2001177513A	06-29-2001	NIPPON TELEGRAPH & TELEPHONE et al.		
	076	JP2000137551A	05-16-2000	MITSUBISHI ELECTRIC CORP.		
	077	RU2073913C1	02-20-1997	KONINKL PHILIPS ELECTRONICS NV [NL] et al.		
	078	RU2077113C1	04-10-1997	VOENNAYA AKADEMIYA SVYAZI [KZ] et al.		
	079	RU2091983C1	09-27-1997	CHIZHUKHIN GENNADIJ N [SU] et al.		
	080	RU2115249C1	07-10-1998	MOTOROLA INC [US] et al.		
	081	RU2147792C1	04-20-2000	MOTOROLA INC [US] et al.		
	082	RU2187205C2	08-10-2002	SAMSUNG ELECTRONICS CO LTD [KR] et al.		
	083	WO0008883A1	02-17-2000	ERICSSON INC [US] et al.		
	084	WO0013356A1	03-09-2000	MOTOROLA INC [US] et al.		

EXAMINER SIGNATURE

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \* Applicant's unique citation designation number (optional). \* See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. \* Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). \* For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. \* Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. \* Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO		<b>Complete if Known</b>		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		<b>Application Number</b>	09/933 972	
		<b>Filing Date</b>	2001-08-20	
		<b>First Named Inventor</b>	PHILIP HAWKES	
		<b>Art Unit</b>	2439	
		<b>Examiner Name</b>	SIMITOSKI, MICHAEL J	
<b>Sheet</b>	<b>6</b>	<b>of</b>	<b>11</b>	<b>Attorney Docket No:</b> 010497

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sub>6</sub>
		Country Code <sup>2a</sup> Kind Code <sup>2b</sup> (if known)				
	085	WO0057601A1	09-28-2000	NOKIA NETWORKS OY [FI] et al.		
	086	WO0062547A1	10-19-2000	OPENTV INC [US] et al.		
	087	WO0076125A1	12-14-2000	NORTEL NETWORKS LTD [CA] et al.		
	088	WO0078008A1	12-21-2000	SSH COMM SECURITY LTD [FI] et al.		
	089	WO0101630A1	01-04-2001	ERICSSON TELEFON AB L M [SE] et al.		
	090	WO02054663A2	07-11-2002	QUALCOMM INC [US] et al.		
	091	WO0247407A2	06-13-2002	QUALCOMM INC [US] et al.		
	092	WO8607224A1	12-04-1986	SCIENTIFIC ATLANTA [US] et al.		
	093	WO9715161A1	04-24-1997	NOKIA TELECOMMUNICATIONS OY [FI] et al.		
	094	WO9825422A1	06-11-1998	NOKIA TELECOMMUNICATIONS OY [FI] et al.		
	095	WO9959355A2	11-18-1999	NOKIA NETWORKS OY [FI] et al.		
	096	WO03063418A1	07-31-2003	QUALCOMM INC [US]		

EXAMINER SIGNATURE

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 808. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \* Applicant's unique citation designation number (optional). \* See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. \* Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). \* For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. \* Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. \* Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22315-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449/PTO		Complete if Known		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		<b>Application Number</b>	09/933,972	
		<b>Filing Date</b>	2001-08-20	
		<b>First Named Inventor</b>	PHILIP HAWKES	
		<b>Art Unit</b>	2439	
		<b>Examiner Name</b>	SIMITOSKI, MICHAEL J	
<b>Sheet</b>	7	of	11	<b>Attorney Docket No:</b> 010497

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T2	
	097	PANNETRAT et al., Authenticating Real-Time Packet Streams And Multicasts, 2002 IEEE. Computers and Communications, 2002. Proceedings. ISCC 2002. Seventh International Symposium on, pp 490 - 495.		
	098	BAUGHER et al.: "The Secure Real Time Transport Protocol (Draft 09)" INTERNET ENGINEERING TASK FORCE, AVT WORKING FROUP, INTERNET -DRAFT, July 2003, XP002320685.		
	099	MEIER J.D. et al: "Building Secure ASP.NET Applications: Authentication, Authorization, and Secure Communication: Cryptography and Certificates" MICROSOFT PATTERNS & PRACTICES, November 2002, pages 1-5. XP002321827.		
	0100	ASAKA et al., "Dynamic Multicast Routing Using Predetermined Path Search". Technical Report of IEICE (The Institute of Electronics, Information and Communication Engineers), SSE95-56 IN99-37 CS99-78, September 27, 1999.		
	0101	TADAUMI, "IP Technology as Communication Infra," The Institute of Electronics Information and Communication Engineers, column 83, No. 4, April 2000, pages 286-294.		
	0102	WILLIAM Stallings: "Cryptography and network security: Principles and Practice" Second Edition, 1999, Prentice Hall, New Jersey.		
	0103	"Functional Model of a Conditional Access System", EBU Review - Technical European Broadcasting Union, Bussels, BE, No.266; Dec 21, 1995; pgs 64-77. XP000559450.		
	0104	"TIA/EIA/IS-95-B Mobile Station-Base Station Compatibility Standard For Dual-Mode Wideband Spread Spectrum Cellular System." (IS-95 STANDARD).		
	0105	010497 International Search Report PCT/US02/009835, ISA, EPO, 7/8/02.		
	0106	3G TS 25.213 V4.1.0 (2001-06) 3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Spreading and Modulation (FDD)(Release 4).		
	0107	3GPP TS 25.211 V4.2.0 (2001-09) 3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Physical Channels and Mapping of Transport Channels Onto Physical Channels (FDD)(Release 4).		
	0108	3GPP TS 25.212 V4.2.0 (2001-09) 3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Multiplexing and Channel Coding (FDD)(Release 4).		
	0109	3GPP TS 25.214 V4.2.0 (2001-09) 3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Physical Layer Procedures (FDD)(Release 4).		

EXAMINER SIGNATURE

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \* Applicant's unique citation designation number (optional). \* See Kinda Codes ofUSPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. \* Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). \* For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. \* Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. \* Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to fit (and by theUSPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1459, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449/PTO		Complete if Known	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		Application Number	
		09/933,972	
		Filing Date	
		2001-08-20	
		First Named Inventor	
		PHILIP HAWKES	
		Art Unit	
		2439	
		Examiner Name	
		SIMITOSKI, MICHAEL J	
Sheet	8	of	11
		Attorney Docket No: 010497	

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T2
	0110	3GPP2 C.50002-0 Version 1.0 (1999-07) 3rd Generation Partnership Project 2 "3GPP2" Physical Layer Standard for cdma2000 Spread Spectrum Systems.	
	0111	AL-TAWIL, "A New Authentication Protocol for Roaming Users in GSM", Proceedings for IEEE International Symposium on Computers and Communication, 6 July 1999, pp 93-99.	
	0112	B.G. MARCHEM et al. "Intelligent Control of Mobile Multimedia Systems" Vehicular Technology Conference 1998. VTC 98, 48th IEEE Ottawa, Canada, May 18-21 1998; New York, USA, May 18, 1998, pages 2047-2051.	
	0113	BACCELLI, F et al. "Self Organizing Hierarchical Multicast Trees And Their Optimization," INFOCOM 1999. IEEE, 1081-1089 (21 MARCH 1999).	
	0114	BORMANN, et al., "Robust Header Compression (ROHC)," Internet Engineering Task Force IETF Draft, 1-145, Feb. 26, 2001.	
	0115	BROWN: "The Electronic Post It Note Model for Mobile Computing Applications," Computing Lab, The University, Canterbury, Kent, The Institution of Electrical Engineers, IEEE, Savoy Place, London, WC2R 0BL, UK.	
	0116	ESTRIN, et al., "The Protocol Independent Multicast-Sparse Mode (PIM-SM)," RFC 2362, June 1998.	
	0117	ETSI: "Universal Mobile Telecommunications Systems (UMTS); Multimedia Broadcast/Multicast Service (MBMS); Stage 1, 3GPP TS 22.146 version 5.2.0 Release 5", ETSI TS 22.146 v5.2.0, pages 1-15, 03/2002.	
	0118	GONG, L et al: "Trade-Offs In Routing Private Multicast Traffic," Global Telecommunications Conference, 1995. IEEE, 2124-2128 (13 NOV 1995).	
	0119	GREG Rose et al., "The Secure Real Time Transport Protocol," Internet Draft, February 2001, pages 1-26.	
	0120	KALLIOKULJU J.: "User Plane Architecture of 3rd Generation Mobile Telecommunication Network," IEEE International Conference on Networks, ICON, Proceedings on Networks (ICON'99), 28 September 1999 (1999-09-28) - 1 October 1999 (1999-10-01), pgs. 270-278, XP010354980.	
	0121	LIN, et al: "A Multicast Routing Protocol for Multihop Wireless Networks," Dept. of Computer Science and Information Engineering, Chung Cheng University, Taiwan, Global Telecommunications Conference, XP010373304.	
	0122	LOU et al., "Progressive Video Streaming Over 2G and 3G Wireless Systems," Proceedings Of The 11TH IEEE International Symposium On Personal Indoor And Mobile	

EXAMINER SIGNATURE

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \* Applicant's unique citation designation number (optional). \* See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. \* Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). \* For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. \* Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST 16 if possible. \* Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing the burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449P(2)		Complete if Known		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		Application Number	09/933,972	
		Filing Date	2001-08-20	
		First Named Inventor	PHILIP HAWKES	
		Art Unit	2439	
		Examiner Name	SIMITOSKI, MICHAEL J	
Sheet	9	of	11	Attorney Docket No: 010497

## NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T2
		Radio Communications, vol. 2, September 18-21, 2000, London, pages 1550-1554.	
	0123	MACQ. BENOIT M et al. "Cryptography For Digital TV Broadcasting", 1995 IEEE.	
	0124	MENEZES, A et al.: "Handbook of Applied Cryptography" 1997, CRC Press LIC, USA XP002248262 Pgs. 497-500, 551-552.	
	0125	MENEZES, A et al.: "Handbook of Applied Cryptography," Chapter 13, pp. 543-590, CRC Press (1996).	
	0126	MIYAZAKI: "A Stream-data Multicast Protocol Using IP Unicast Address" Technical Report of IEICE, IN2001-9, May 11, 2001.	
	0127	MOOIJ, W.: "Advances in Conditional Access Technology", IEEE, pp. 461-464 (1997-09).	
	0128	MOY, "Multicast Extensions to OSPF," RFC 1584, March 1994.	
	0129	PAUL K et al: "A Stability-Based Distributed Routing Mechanism To Support Unicast And Multicast Routing In Ad Hoc Wireless Network" Computer Communications, Elsevier Science Publishers BV, Amsterdam, NL, VOL. 24, NO. 18, 1 DEC 2001, Pages 1828-1845, XP0043	
	0130	SCHNEIER, B.: "Applied Cryptography, Conference Key Distribution and Secret Broadcasting" Second Edition, pp. 520, 523-524, John Wiley & Sons, Inc. XP002248263 (1996).	
	0131	SCHNEIER, B.: "Applied Cryptography," Second Edition, pp. 170, 171, 173, John Wiley & Sons, Inc. (1996).	
	0132	STALLINGS, W.: "Cryptography and network security" 1995, Prentice-Hall, Inc., XP002248261 pgs 402-406, 413-417, 421-424.	
	0133	TAKAHASHI: "Prospect of Push type Information Providing Service/Technology," Information Processing, Vol. 39, No. 11, November 15, 1998, p. 1124 - 1131.	
	0134	TANENBAUM, ANDREW S.: COMPUTER NETWORKS: SECOND EDITION; PUB 1993 XP2530414.	
	0135	TIA/EIA/IS-856 Interim Standard cdma2000 High Rate Packet Data Air Interface Specification (2000-11).	
	0136	TIA/EIA/IS-95-A (Revision of TIA/EIA/IS-95) Mobile Station-Base Station Compatibility Standard for Dual-Mode Wideband Spread Spectrum Cellular System (1995-05).	
	0137	TOH C-K et al: "Abam: On-Demand Associativity-Based Multicast Routing For AD HOC Mobile Networks," Vehicular Technology Conference, 2000. IEEE, 987-993 (2000).	

EXAMINER SIGNATURE

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \* Applicant's unique citation designation number (optional). \* See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. \* Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). \* For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. \* Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. \* Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to fill (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO		<i>Complete if Known</i>		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		Application Number	09/933,972	
		Filing Date	2001-08-20	
		First Named Inventor	PHILIP HAWKES	
		Art Unit	2439	
		Examiner Name	SIMITOSKI, MICHAEL J	
Sheet	10	of	11	Attorney Docket No.: 010497

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T2	
	0138	WAITZMAN, et al., "The Distance Vector Multicast Routing Protocol (DVMRP)," RFC 1075, Nov. 1, 1998.		
	0139	YANG et al: "An Efficient Multicast Delivery Scheme To Support Mobile IP," Database And Expert Systems Applications, 1999. IEEE, 638-88 (1 SEPTEMBER 1999).		
	0140	YOU XIAOHU, "D&R Progress On China's 3G Mobile Communications", Telecom Science, VOL. 2, 2001, Pages 11-17.		

EXAMINER SIGNATURE

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. † Applicant's unique citation designation number (optional). ‡ See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. § Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ¶ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. \*\*Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. †† Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.